PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (see an example) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	"It can't be very important because it comes and goes" - Patients' accounts of intermittent symptoms preceding a pancreatic cancer diagnosis: a qualitative study
AUTHORS	Evans, Julie; Chapple, Alison; Salisbury, Helen; Corrie, Philippa; Ziebland, Sue

VERSION 1 - REVIEW

REVIEWER	Frank Buntinx Dept of General Practice
	KU Leuven, Belgium
	& U Maastricht, the Netherlands
REVIEW RETURNED	22-Oct-2013

GENERAL COMMENTS	Discussion:
	This is a very good and nice study. However, it may be good to stress even more that these results do not mean that intermittent signe and symptoms are a reliable predictor for a diagnosis of pancreatic cancer. It may be good to stimulate the scientific community to design a standard diagnostico study examining the diagnostic value of these (and other) symptoms. In such study not only sensitivity, but also specificity would be studied.
	Please provide supporting info that your number of patients is sufficient.

REVIEWER	Fiona Walter
	University of Cambridge, UK
REVIEW RETURNED	11-Nov-2013

	There are, however, several major and a number of minor issues which could be addressed to strengthen the paper. Major issues: (1) The intermittent nature of symptoms as a cause for longer pre-
GENERAL COMMENTS	This qualitative study uses in depth interviews to describe symptoms and their interpretations leading up to the diagnosis of pancreatic cancer from the perspective of both patients and their carers. While a number of studies have used routinely collected data from primary and secondary records, this exploration of the pre-diagnostic interval gives important new insights which would be of interest and value to the largely clinical readership of the BMJ Open.

- around symptom appraisal and triggers for help-seeking, especially for upper and lower GI cancers (e.g. Macleod 2009, Molassiotis 2010); the novelty of this paper is that it has been identified for the first time for pancreatic cancer. This point needs to be made much clearer throughout the paper.
- (2) The majority of patient accounts included in this analysis are from people with potentially curable cancer at diagnosis (21 + 2) compared with those offered chemotherapy & radiotherapy (9 + 5) or palliation alone (2). As well as having an earlier stage pancreatic cancer, this may have had an impact on their symptom appraisal and help-seeking pathways. Again, this needs more discussion and interpretation.
- (3) While well written, some of the paper, particularly the results section, is written more for a social science than clinical readership. It would benefit from some editing.

Minor issues:

- (1) Abstract
- a. Results: please add more description of the sample: age, gender, stage at diagnosis
- b. Could omit sentence beginning: 'these findings build on...'
- (2) Key message: are the four triggers identified 'new'? Perhaps for pancreatic cancer but certainly not for other cancers, see Emery 2013, Macleod 2009 etc. Suggest this 'key message' is omitted.
- (3) Introduction
- a. The first sentence reads: '... widely believed to occur late in the disease' is only partly correct. Jaundice and abdominal pain occur late, but the non-specificity of the earlier symptoms are exactly why it is so hard to make an earlier diagnosis.
- b. The second paragraph is well written but contains too many references. Also I don't agree that 'There are a number of theories....' In fact, this research area only had Safer and Andersen's theories to underpin it until recently. I'd suggest that these references relate to evidence rather theories.
- c. The third paragraph- a summary of the findings- this could be omitted and replaced with a clearer sentence giving the aim for this study.
- (4) Methods are clear and well written.
- (5) Results: as above, could benefit from editing, especially the quotations which are sometimes over-long. The second paragraph ('Symptoms that sometimes occur intermittently... no-one mentioned pancreatitis by name') is not really reporting the results and would be more appropriate in the discussion. The symptoms could equally relate to oesophageal-gastric or colorectal cancer symptoms.
- (6) Discussion: is again well written.
- a. The first paragraph could be clarified in light of the comments above.
- b. The supposition about preceding pancreatitis needs to be clarified; the symptoms could equally relate to other upper and/or lower GI disease. This comment applies to the first paragraph of the discussion and to p11, lines 27-33.
- c. There is no discussion of the strengths and weaknesses of this study apart from around recall bias; e.g. the patients are self-selected and therefore may represent people with strong views about their pre-diagnostic route, or particularly long times to diagnosis.

VERSION 1 – AUTHOR RESPONSE

Dr Fiona Walter had three major issues with our paper. Our responses are as follows:

- (1) We have added text to the conclusion section of the abstract, the key messages, and the second paragraph of the discussion (with appropriate references) to try to clarify that although the intermittent nature of symptoms as a cause for longer pre-diagnostic intervals have been described in the general literature around symptom appraisal and triggers for help-seeking, the novelty of our paper is that they have been identified for the first time in pancreatic cancer.
- (2) We have added treatment information to each quote identifier to show that intermittent symptoms occurred among people who did not present with potentially curable disease as well as in those who did. We have added a statement to the discussion to explain that stage at diagnosis was therefore unlikely to have impacted on the symptom appraisal of our participants.
- (3) We welcome the reviewer's advice to make our paper more relevant to a clinical readership but our study is social science led and we believe that our contribution to social science theory enhances the paper, is relevant to a clinical audience (in our experience clinicians respond well to the inclusion of social science theory) and might attract a wider readership to BMJ Open. We have therefore retained all existing references to social science theory in the paper.

Our response to Dr Fiona Walter's minor issues are dealt with in turn below:

- (1) More information about the sample has been added to the 'participants' section of the abstract. We have retained the sentence beginning: 'these findings build on social science theories...' as explained above.
- (2) We have removed the word 'new' and revised the 2nd key message to clarify that we have identified these four triggers as being important in the context of intermittent as opposed to persistent symptoms.
- (3) A. We have revised the first sentence of the introduction to explain that it is the early symptoms of pancreatic cancer that tend to be vague and non-specific whereas more indicative symptoms such as jaundice occur later in the disease.
- B. The second paragraph of the introduction, concerning theories of help seeking behaviour, has been revised and the number of references reduced.
- C. Most of the contents of the third paragraph of the introduction have been integrated with relevant passages in the discussion and a clearer statement made of the aims of this paper.
- (4) Nothing to revise
- (5) Three of the quotes have been shortened slightly by removing a non-essential passage, but in all other cases we believe that the full quote is necessary to accurately report the participant's story

rather than imposing our own selective interpretation. The second paragraph ('Symptoms that sometimes occur intermittently... no-one mentioned pancreatitis by name') has been moved to the discussion and we have added that such symptoms may occur in other GI cancers.

- (6) A. A sentence has been added to the discussion to clarify that not all of our four triggers are new in the general literature about help seeking for other conditions, but that they are important in the context of intermittent as opposed to persistent symptoms.
- B. Paragraph 1 of the discussion has been clarified to state that these gastrointestinal symptoms may occur in other GI cancers. The reference to pancreatitis has been removed from paragraph 4.
- C. The discussion section already states that we sampled for a wide range of characteristics and experiences of having pancreatic cancer not just those with particular concerns about pre-diagnostic experiences. We have attempted to clarify in the abstract, introduction, methods and discussion sections that this paper concerns a single theme from a much wider study of all aspects of having pancreatic cancer.